

**MALCOLM PIRNIE, INC.**

**PASSAIC RIVER ESTUARY  
PRE-EXPANSION ACTIVITIES  
PROGRESS REPORT**

MPI. PROJECT NO.:	0285-924
CLIENT:	USACE-KC
CONTRACT NO.:	DACW41-02-D-0003, <b>Task Orders 0008 and 0011</b>
LOCATION:	New Jersey
REPORT NO.:	7
DATES COVERED:	May 10, 2003 through June 13, 2003
EPA IAG Nos.:	DW96941915

**PREPARED BY:**

Bruce Fidler, Malcolm Pirnie Project Manager  
Lisa Szegedi-Greco, Deputy Project Manager

**Task Order 0008/RI/FS**

<b>Contract Action</b>	<b>Estimated Cost</b>	<b>Fixed Fee</b>	<b>Total Estimated Costs</b>
ATP 1	\$791,654	\$60,956	\$852,610
Total Authorized Amount:			\$852,610

1. WVN No. 1 was submitted on January 31, 2003 and signed by the USACE on February 4, 2003. This WVN moves dollars and hours from WAD02, subtask WO8a (95 hours and \$10,550) and WAD02, subtask WO 8g (40 hours and \$8,410) to a new task (WAD 02, WO 8k – Public Website Set-up).

**Task Order 0011/RI/FS**

<b>Contract Action</b>	<b>Estimated Cost</b>	<b>Fixed Fee</b>	<b>Total Estimated Costs</b>
ATP 1	\$306,945	\$18,317	\$325,262
Total Authorized Amount:			\$325,262

1. Submitted work basis, cost estimate and ATP for WOs 1-6 to the USACE on December 20, 2002. Conducted negotiations on the above cost estimate among USEPA, USACE, and MPI on January 6 and February 14, 2003. The final cost proposal was sent to the USACE on February 24, 2003 and the ATP was approved by the USACE on March 11, 2003.

**A. *Current Status Summary (May 10, 2003 through June 13, 2003)***

**WAD 1: PROJECT MANAGEMENT**

- Prepared and submitted sixth set of Earned Value (EV) curves and Progress Report covering the period April 12, 2003 through May 9, 2003.
- Prepared and submitted an invoice for the period covering April 12, 2003 through May 9, 2003.
- A final project schedule, with actual start and finish dates, where applicable, was completed.
- Weekly conference calls to discuss project status and action items were held.

## **WAD 2: RI/FS SERVICES**

- Continued minimal development of the public website; ourPASSAIC.org.
- The MERI request letter was submitted to the USEPA and USACE.
- The Document Management area of the project website was amended to give editing and deleting rights to a document author.
- An additional option for database development was created and submitted to USEPA and USACE.

## **WAD 3: ADDITIONAL RI/FS SERVICES**

- Work continued on the PEAP and QCP variance.

### ***B. Problems Encountered and Solved***

**Problem:** There are several outstanding items on the action item list that need resolution before additional work can continue. These include, among other items, scheduling a data source meeting with the N.J. Department of Environmental Protection (NJDEP), which needs a request letter from the USEPA, creating a database structure for the historical and RI/FS data, which needs a decision on the HEP/CARP Evaluation Report, and obtaining copies of relevant files from the USEPA archives, which requires a decision from USEPA on whether the copying will be conducted in-house or will be outsourced.

**Solution:** Work has begun on completing the outstanding action items. A meeting to discuss the HEP/CARP Evaluation report is scheduled for June 17, 2003.

### ***C. Meetings***

- A meeting was held with USEPA and USACE on May 13, 2003. The purpose of this transition meeting was to acquaint the Malcolm Pirnie project management team with Alice Yeh, the new USEPA RPM assigned to the project, and to examine project priorities, as well as to identify action items that must be completed before technical work can resume on the project.

### ***D. Schedule/Budget***

- Earned value curves for Task Order No. 8 and Task Order No. 11 are attached to this progress report and summarized in Attachment 1.

***E. Planned Activities***

- A meeting with USEPA, USACE-KC, USACE-NY, NJDOT-OMR, HydroQual, Battelle, and the Hudson River Foundation is scheduled for June 17, 2003. The objectives of the meeting are to discuss the HEP/CARP modeling framework and its applicability to the Passaic River project, determine whether unvalidated HEP/CARP data can be released to HydroQual so work can resume on the mass balance task, and determine whether the project database will be an integration with HEP/CARP or whether it will be a separate database.
- A centerline, which begins at the mouth of the Passaic River, will be established.
- A data meeting will be scheduled with NJDEP.
- A schedule will be established with TSI for data exchange meetings.
- The public website interface, ourPASSAIC.org, will be reviewed and comments will be incorporated.
- Comments on HydroQual's interim technical memorandum will be submitted via Forums.
- USEPA and MERI files will be copied, scanned into pdf, and uploaded to the digital library.

***F. Subcontractor Activity***

- HydroQual conducted the following activities during the reporting period:

Plotting of PCBs continued in terms of vertical profiles of the data at sampling core locations. This will help facilitate data preparation for interpolation and calculation of the total mass within the sediments. The data analysis was set up as a series of scripts, with consideration being given to determining whether PAH concentrations and total organic carbon can be correlated. The data will be presented as a series of panels on a page and will also be plotted on a map of the river next to their corresponding geographic location.

Work was performed to examine the extent of the model domain and how the HEP/CARP grid overlaps the present Lower Passaic River six-mile reach. Consideration was given to determining how data from the NOAA database in the region could be used to provide inputs to the mass balance calculation.

**ATTACHMENT 1**  
**SUMMARY OF COST PERFORMANCE**

## ***TABLE OF CONTENTS***

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### Summary of Task Orders 0008 and 0011/Project Management/RI/FS Activities

#### WAD 1 Project Management Earned Value Curve

WO 1 – Project Administration .....	1
WO 2 – Meetings .....	1
WO 3 – Technical Support .....	1
WAD 1 – Expenses .....	2

#### WAD 2 RI/FS Activities Earned Value Curve

WO 1 – PEAP .....	3
WO 2 – Inventory Historical Data .....	3
WO 3 – Evaluate HEP/CARP Database .....	4
WO 5 – Conceptual Model .....	5
WO 6 – Mass Balance and Quantification .....	5
WO 7 – Evaluate HEP/CARP Framework .....	5
WO 8 – Website and GIS System .....	5
WO 10 – QCP .....	6
WAD 2 – Expenses .....	6

#### WAD 3 Additional RI/FS Activities Earned Value Curve

WO 1 – Project Management .....	7
WO 2 – Meetings .....	7
WO 3 – PEAP and Schedule .....	7
WO 4.1 – Develop Data Scheme .....	7
WO 4.2 – Populate Analytical Database .....	8
WO 5 – Website and GIS System .....	8
WO 6 – Establish Technical Expert Team .....	8

## **Task Order 0008 – Project Management**

### **WAD 1: Project Management, WO 1, Project Administration**

**Scope:** Provide overall management activities to oversee technical, subcontracting and financial activities.

**Variance Analysis:** This task is currently slightly over budget due to the billing/clerical task. This task had a larger than normal amount of hours charged to it during a previous reporting period since there was a significant amount of conflict of interest (COI) duties. Since this task has been completed, this variance is being reduced. However, this may be offset by the need to produce two separate invoices (one for Task Order 0008 and one for Task Order 0011) during all future billing cycles. Originally, this task was budgeted under the assumption that all the work would be completed under one Task Order, and that a single invoice would be prepared per month. Project administration effort is also being expended to upgrade the project schedule as comments are received from USACE.

**Corrective Action Plan:** None. However, the costs associated with completed two invoices will be carefully tracked to determine if the budget for the billing/clerical subtask will need to be increased in a future WVN. Also, as the bulk of the schedule upgrade will have been completed by early to mid-July, this effort should subside to routine maintenance activities by August.

### **WAD 1: Project Management, WO 2, Meetings**

**Scope:** Includes cost associated with project team meetings including meetings with USACE and USEPA.

**Variance Analysis:** This task is currently behind schedule since a project meeting is scheduled every two months; however, no meetings were held in January, February, March, or April.

**Corrective Action Plan:** It is anticipated that regular project meetings will be held now that a new USEPA RPM has been assigned to the project.

### **WAD 1: Project Management, WO 3, Technical Support**

**Scope:** Provide support to the USACE and USEPA, as directed by the USACE.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease as technical work on the project resumes.

### **WAD 1: Project Management (Expenses)**

**Scope:** Office expenses for computer and reproduction services.

**Variance Analysis:** None

**Corrective Action Plan:** None



## **Task Order 0008 – RI/FS Activities**

### **WAD 2: RI/FS Activities, WO 1, PEAP**

**Scope:** Prepare a Draft and Final PEAP utilizing Work Plans from similar sites.

**Variance Analysis:** This task, which is completed, is over budget. The reason for this is a change in the approach for development of the document. The negotiated cost was based on the assumption that the document was to be prepared quickly using readily available material previously prepared by USEPA, and utilizing Work Plans from similar sites. While Work Plans for similar sites that are available to Malcolm Pirnie may be helpful in preparing investigation plans for the next phase of work, they generally encompass tasks that bear little similarity to a number of the tasks being undertaken in this phase and were not generally helpful for this effort. Also, given the basis of the budget negotiated, it was expected that details of format and style would be of limited concern and that Malcolm Pirnie would employ typical formats used on other projects for the USEPA and the Kansas City District. Responsiveness to the greater detailed interest than anticipated in presentation styles for text and graphics has led to more iterative efforts in document preparation than expected. It is expected that as format and style appropriate to this project are developed and standardized, preparation of later documents will become more routine.

**Corrective Action Plan:** Malcolm Pirnie proposes to prepare a brief SOP incorporating format and style standards for text and graphics agreed upon for this project to guide the various technical teams for future deliverables.

### **WAD 2: RI/FS Activities, WO 2, Inventory Historical Data**

**Scope:** Create an inventory of historical data, reports, and papers pertinent to the Passaic River Estuary. This includes creating an overview report that lists all potential sources that were identified, as well as gives a brief summary of what information is available from each source. This task also includes researching, assembling, and evaluating readily available base mapping for the Passaic River Estuary and creating a mapping overview report.

**Variance Analysis:** This task is currently slightly over budget and slightly behind schedule. The reason this task is over budget is because WO02, Task 2f, which is completed, is over budget. There are several reasons contributing to this. First, the negotiated cost was based on a study area limited to the 17-mile tidally influenced area of the Passaic River. The budget assumption was that the primary source of base mapping data would be the NJDEP, which was known to have high quality mapping for this study area. We anticipated acquiring key datasets (primarily from NJDEP) and identifying additional local sources and studies within this study area only. However, this scope was expanded to support the development of public presentation graphics that included the entire watershed area extending into New York State. This required the

acquisition and evaluation of additional data sources, and the resolution of inconsistencies between data from multiple state and federal sources.

Second, preparation of presentation and PEAP mapping was a highly iterative process. Significant efforts were expended in determining formats and styles of the various maps being prepared, as well as ongoing discussions as to the precise boundaries of the areas to be shown on the maps. In addition, while the available data layers were highly detailed, it was felt that simplified versions would be more appropriate to best communicate the material to the public as the project moves forward. To this end, the available data required reformatting to reduce the level of detail, which was also an iterative process.

This task is behind schedule for several reasons: 1) It was anticipated that document copying would have already started; 2) Since many of the initial data source contacts were obtained from the USEPA, this task has been conducted for less budget than anticipated. However, it is anticipated that this variance will be reduced in the future as previously unidentified data sources are discovered; and 3) One of the major data source visits (the NJDEP) cannot be conducted until the USEPA obtains access.

**Corrective Action Plan:** Now that a new USEPA RPM has been assigned it is anticipated that several of the action items will be cleared up and work will again begin on this task. It should be noted that it is anticipated that the budget variance will increase in the future as other subtasks such as copying and scanning are started since some of the assumptions used in the cost estimate were inaccurate. For example, it was assumed that the reports could be removed from the data source for copying purposes; however, it is possible that MERI will require that the reports be copied on-site.

## **WAD 2: RI/FS Activities, WO 3, Evaluate HEP/CARP Database**

**Scope:** Evaluate the viability of integrating the existing HEP/CARP database with the system-wide database being developed for the project.

**Variance Analysis:** None

**Corrective Action Plan:** None

## **WAD 2: RI/FS Activities, WO 5, Conceptual Model**

**Scope:** Develop an understanding of the processes affecting the fate and bioaccumulation of metals and organic chemicals within the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

## **WAD 2: RI/FS Activities, WO 6, Mass Balance and Quantification**

**Scope:** Create an estimate of the mass of each contaminant of concern present in the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, this task cannot be completed without water column data from HEP/CARP.

**Corrective Action Plan:** A meeting was held with the Hudson River Foundation (HRF) to determine if they would release unvalidated water column data. As a result of the meeting, it was agreed that HRF would hold a conference call with CARP Management Committee members to obtain agreement to release the data.

## **WAD 2: RI/FS Activities, WO 7, Evaluate HEP/CARP Framework**

**Scope:** Review the HEP/CARP framework with respect to applicability to the contaminants of concern in the Passaic River Estuary.

**Variance Analysis:** This task is currently behind schedule since work appears to have been initiated more slowly than anticipated. In addition, technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

## **WAD 2: RI/FS Activities, WO 8, Website and GIS System**

**Scope:** Create a Passaic River Estuary Project Web Site/Database that will serve as the access point for all study data, documents, and project related files.

**Variance Analysis:** None

**Corrective Action Plan:** None

## **WAD 2: RI/FS Activities, WO 10, QCP**

**Scope:** Prepare a Draft and Final QCP.

**Variance Analysis:** This task, which is complete, is over budget. The reason for this is that this document was prepared in concert with the PEAP and, similarly, responsiveness to the greater detailed interest than anticipated in presentation styles for text and graphics has led to more iterative efforts in document preparation than expected.

**Corrective Action Plan:** It is expected that a brief SOP standardizing format and style for maps and graphics, as discussed for WO 1, will guide future work products.

## **WAD 2: Investigation Support (Expenses)**

**Scope:** Office expenses for computer and reproduction services and subcontractor fee.

**Variance Analysis:** The subcontractor fee task is slightly behind schedule. The work was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

## **Task Order 0011 – Additional RI/FS Activities**

### **WAD 3: Additional RI/FS Activities, WO 1, Project Management**

**Scope:** Provide overall management activities for Battelle to oversee technical and financial activities.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 2, Meetings**

**Scope:** Includes cost associated with project team meetings including meetings with MPI, USACE and USEPA.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 3, PEAP and Schedule**

**Scope:** Includes cost associated with amending the PEAP and QCP to reflect additional tasks that are part of WAD 3.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 4.1, Develop Data Scheme**

**Scope:** Includes cost associated with conducting a review of all of the data collected for the project and establishing its relevance to the site. This will include creating a database structure, establishing an initial data quality scheme, and making an interim decision on the relevance of each report.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new

USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 4.2, Populate Analytical Database**

**Scope:** Includes cost associated with populating the project database with both electronic and hardcopy data. This will consist of manual data entry of hardcopy data and the associated quality assurance, amending the format of data source databases to be compatible with the project database and then uploading the data, creating a memo that documents the approach used for these activities, and management and oversight.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 5, Website and GIS System**

**Scope:** Includes cost associated with providing technical support and management for the project website creating under WAD 2. This also includes integrating HEP/CARP with the Passaic River Estuary database.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

### **WAD 3: Additional RI/FS Activities, WO 6, Establish Technical Expert Team**

**Scope:** Includes cost associated with identifying specialty areas crucial to the project as well as recognized experts in each area, selecting one expert in each field to work on the project, and establishing subcontracts with each of the selected experts.

**Variance Analysis:** This task is currently behind schedule since technical work on the project was slowed down at USACE direction until a new USEPA RPM was assigned.

**Corrective Action Plan:** It is anticipated that this variance will decrease now that a new USEPA RPM has been assigned to the project.

**SUMMARY OF TASK ORDER NO. 0008**  
**MANAGEMENT, SUPPORT, AND INVESTIGATION**  
**5/10/03 - 6/13/03**

Task Order No. 0008	Current Budget Cost (BC)	Scheduled Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Estimate to Complete (ETC)	Estimate at Completion (EAC)
WAD 01 (Project Management Administration)	\$ 227,770	\$ 153,199	\$ 141,120	59.3%	\$ 133,807	\$ 97,469	\$ 236,622
WAD 02 (RI/FS Services)	\$ 563,844	\$ 458,234	\$ 311,278	52.6%	\$ 294,434	\$ 233,406	\$ 534,726
NA (Fee)	\$ 60,953	\$ 46,946	\$ 10,646	54.3%	NA	\$ 26,470	\$ 61,708
<b>Total (Less Fee)</b>	<b>\$ 791,614</b>	<b>\$ 611,433</b>	<b>\$ 452,398</b>	<b>54.3%</b>	<b>\$ 428,241</b>	<b>\$ 330,875</b>	<b>\$ 771,347</b>

Task Order No. 0008	Cost Variance (CVAR)	Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio
WAD 01 (Project Management Administration)	\$ (6,084)	\$ (18,269)	0.96	0.88	0.84
WAD 02 (RI/FS Services)	\$ (14,633)	\$ (148,805)	0.95	0.65	0.62
NA (Fee)	NA	NA	NA	NA	NA
<b>Total (Less Fee)</b>	<b>\$ (20,717)</b>	<b>\$ (167,074)</b>	<b>0.95</b>	<b>0.70</b>	<b>1.35</b>

Prepared 6/27/03

	MPI	HQI	Battelle	Total
Total Budget	\$553,244	\$275,935	\$23,432	\$852,611
Total Expended	\$321,298	\$77,677	\$18,894	\$417,868
Remaining Funds	\$231,946	\$198,258	\$4,538	\$434,743
Schedule Status	Work slightly behind schedule	Work slightly behind schedule	On Schedule	

**Calculations:**

PCT = (BCWP/BC) X 100\*

ETC = (BC-BCWP)/(BCWP/ACWP)\*\*

It should be noted that this calculation is conducted at a work element level, not a work order level

CAC = ACWP + ETC

CVAR=ACWP-BCWP

SVAR=BCWS-BCWP

CPI = BCWP/ACWP

SPI = BCWP/BCWS

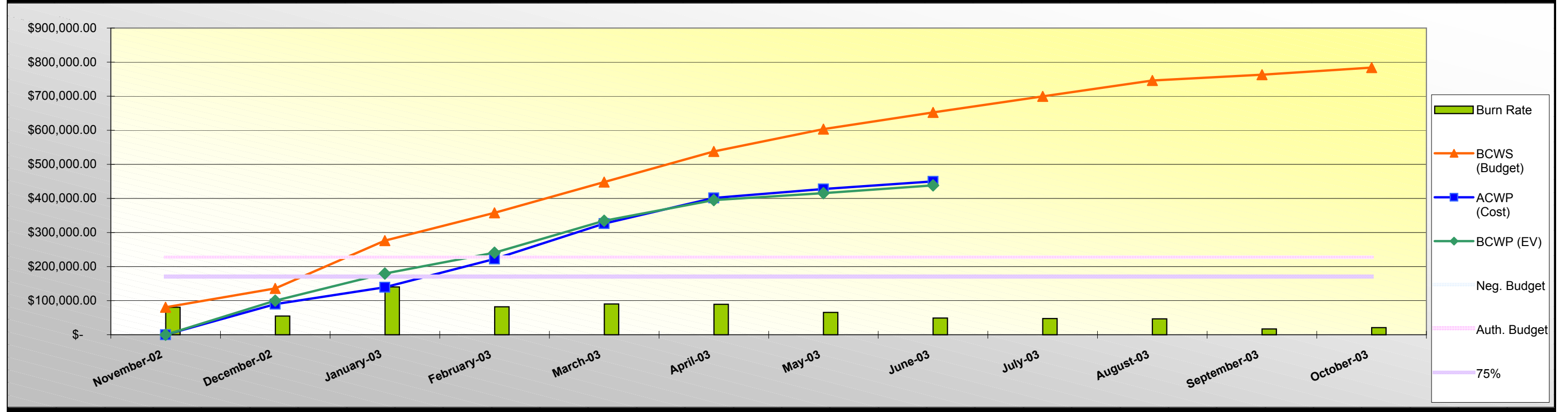
\* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

\*\* - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	Burn Rate - WAD01	Burn Rate - WAD02	Burn Rate - Total
Nov-02	\$ 34,181	\$ 46,654	\$ 80,835
Dec-02	\$ 16,828	\$ 38,149	\$ 54,977
Jan-03	\$ 27,265	\$ 113,045	\$ 140,310
Feb-03	\$ 14,548	\$ 67,366	\$ 81,915
Mar-03	\$ 14,548	\$ 75,705	\$ 90,253
Apr-03	\$ 13,617	\$ 70,918	\$ 84,535
May-03	\$ 22,616	\$ 55,405	\$ 78,021
Jun-03	\$ 14,548	\$ 34,263	\$ 48,812
Jul-03	\$ 18,570	\$ 28,976	\$ 47,546
Aug-03	\$ 17,664	\$ 28,895	\$ 46,559
Sep-03	\$ 14,548	\$ 2,400	\$ 16,949
Oct-03	\$ 18,836	\$ 2,108	\$ 20,945
<b>Burn Rate - Total by WAD</b>	<b>\$ 227,770</b>	<b>\$ 563,885</b>	<b>\$ 791,655</b>

## Cost/Schedule Through June 13th, 2003

### Summary of WADs 1 and 2 Task Order 0008

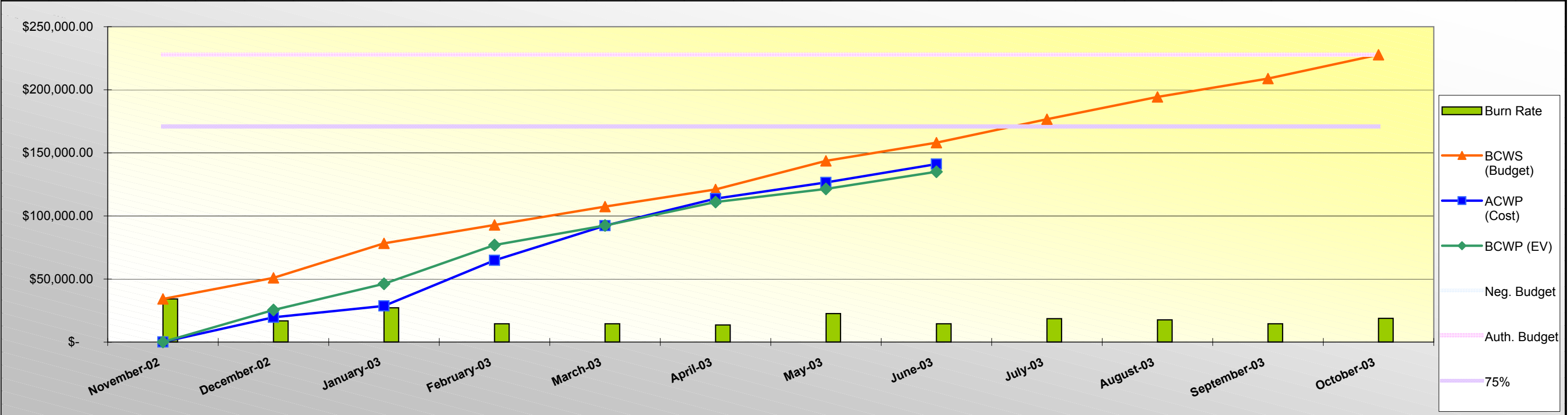


**Note:** The earned value curves depict labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.



Cost/Schedule Through June 13th, 2003

Summary of WAD 1 Task Order 0008 - Project Management Administration

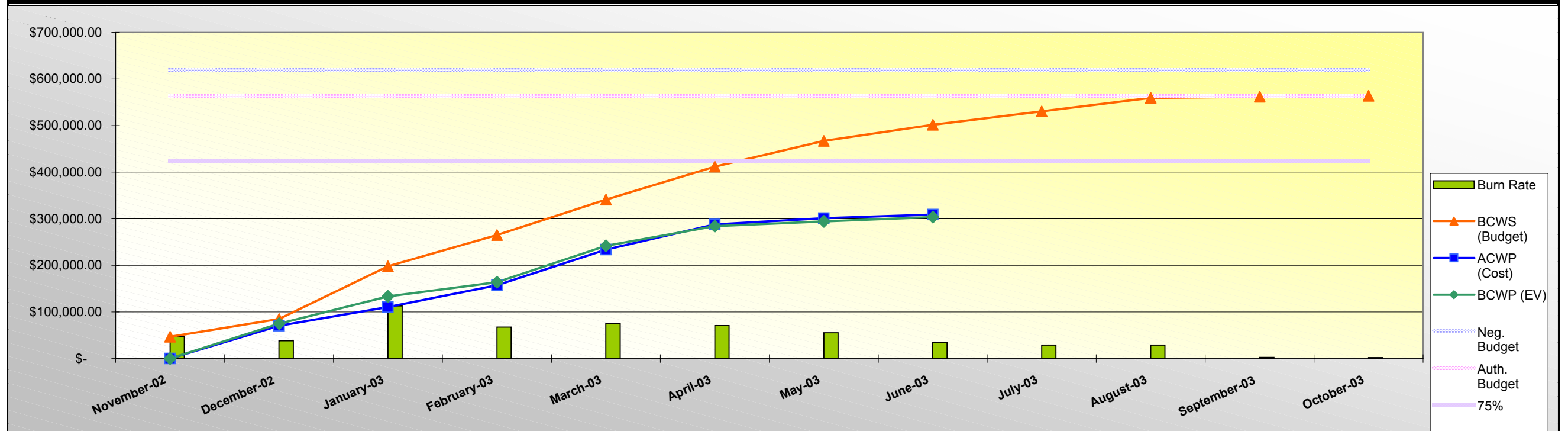


WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
1	1	00	Project Administration/Reporting	\$ 141,356.00	\$ 94,037.99	\$ 99,045.95	66.5%	\$ 94,037.97	\$ 49,837.95	\$ 148,883.90	\$ (5,007.98)	\$ (0.02)
1	2	00	Meetings	\$ 23,496.00	\$ 15,553.50	\$ 8,769.19	32.7%	\$ 7,693.58	\$ 18,011.70	\$ 26,780.89	\$ (1,075.61)	\$ (7,859.92)
1	3	00	Technical Support	\$ 35,901.00	\$ 25,042.48	\$ 17,916.47	49.9%	\$ 17,916.47	\$ 17,984.53	\$ 35,901.00	\$ -	\$ (7,126.01)
1	0	00	Labor Totals	\$ 200,753.00	\$ 134,633.97	\$ 125,731.61	59.6%	\$ 119,648.02	\$ 85,834.17	\$ 211,565.78	\$ (6,083.59)	\$ (14,985.95)
1	0	00	Expenses(Computer/Reproduction)	\$ 25,056.00	\$ 16,704.00	\$ 13,421.00	53.6%	\$ 13,421.00	\$ 11,635.00	\$ 25,056.00	\$ -	\$ (3,283.00)
1	0	00	Travel and Lodging Expenses	\$ 300.00	\$ 200.00	\$ 1,228.88	409.6%	\$ 1,228.88	\$ (928.88)	\$ 300.00	\$ -	\$ 1,028.88
1	0	00	Subcontractor Fee	\$ 1,661.00	\$ 1,661.00	\$ 738.30	44.4%	\$ 738.30	\$ 922.70	\$ 1,661.00	\$ -	\$ (922.70)
1	0	00	WAD Fee(Less Travel)	\$ 18,064.72	\$ 12,107.04	\$ 10,645.52	58.9%	\$ -	\$ 7,797.53	\$ 18,929.74	\$ -	\$ -
1	0	00	Job To DateTotals(Less Fee)	\$ 227,770.00	\$ 153,198.97	\$ 141,119.79	59.3%	\$ 135,036.20	\$ 97,469.17	\$ 236,621.78	\$ (6,083.59)	\$ (18,268.95)

**Note:** The earned value curves depict labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

## Cost/Schedule Through June 13th, 2003

### Summary of WAD 2 Task Order 0008 - RI/FS Services



WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
2	1	00	Pre-Expansion Activity Plan	\$ 41,668.80	\$ 41,668.80	\$ 45,955.43	100.0%	\$ 41,668.80	\$ -	\$ 45,955.43	\$ (4,286.63)	\$ -
2	2	00	Inventory Historical Data	\$ 68,448.87	\$ 68,448.87	\$ 55,608.79	70.6%	\$ 48,316.76	\$ 23,170.47	\$ 78,779.26	\$ (7,292.03)	\$ (20,132.11)
2	3	00	Evaluate HEP/CARP Database	\$ 34,044.72	\$ 34,044.72	\$ 31,882.32	100.0%	\$ 34,044.72	\$ -	\$ 31,882.32	\$ 2,162.40	\$ -
2	5	00	Develop Detailed Conceptual Model	\$ 88,894.00	\$ 88,894.00	\$ 59,958.92	67.4%	\$ 59,958.92	\$ 28,935.08	\$ 88,894.00	\$ -	\$ (28,935.08)
2	6	00	Prelim Contaminant Mass Balance and In-Situ Mass Quantification	\$ 164,160.06	\$ 91,853.37	\$ 3,526.65	2.5%	\$ 4,105.00	\$ 137,505.04	\$ 141,031.69	\$ 578.35	\$ (87,748.37)
2	7	00	Evaluate HEP/CARP Tier 2 Modeling Framework	\$ 11,214.00	\$ 11,214.00	\$ 3,415.94	23.0%	\$ 2,579.00	\$ 11,437.24	\$ 14,853.18	\$ (836.94)	\$ (8,635.00)
2	8	00	Development and Implementation Website/GIS	\$ 105,415.49	\$ 82,751.02	\$ 79,012.38	73.1%	\$ 77,104.37	\$ 29,011.70	\$ 108,024.08	\$ (1,908.01)	\$ (5,646.65)
2	10	00	Quality Control Plan	\$ 8,761.70	\$ 8,761.70	\$ 11,812.33	100.0%	\$ 8,761.70	\$ -	\$ 11,812.33	\$ (3,050.63)	\$ -
2	0	00	Labor Totals	\$ 522,607.64	\$ 427,636.48	\$ 291,172.76	52.9%	\$ 276,539.27	\$ 230,059.53	\$ 521,232.29	\$ (14,633.49)	\$ (151,097.21)
2	0	00	Expenses(Less Travel)	\$ 13,493.36	\$ 7,855.16	\$ 10,147.31	75.2%	\$ 10,147.31	\$ 3,346.05	\$ 13,493.36	\$ -	\$ 2,292.15
1	0	00	Travel and Lodging Expenses	\$ 2,738.00	\$ 2,738.00	\$ 2,211.20	80.8%	\$ 2,211.20	\$ 526.80	\$ 2,738.00	\$ -	\$ (526.80)
1	0	00	Subcontractor Fee	\$ 25,005.00	\$ 20,004.00	\$ 7,747.19	31.0%	\$ 7,747.19	\$ 17,257.81	\$ 25,005.00	\$ -	\$ (12,256.81)
2	0	00	WAD Fee(Less Travel)	\$ 42,888.08	\$ 34,839.33	\$ -	53.5%	\$ -	\$ 18,672.45	\$ 42,778.05	\$ -	\$ -
2	0	00	Job To DateTotals(Less Fee)	\$ 563,844.00	\$ 458,233.64	\$ 311,278.46	52.6%	\$ 296,644.97	\$ 233,405.58	\$ 534,725.65	\$ (14,633.49)	\$ (148,805.06)

**Note:** The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

**SUMMARY OF TASK ORDER NO. 0011**  
**ADDITIONAL RI/FS SERVICES**  
**5/10/03-6/13/03**

Task Order No. 0011	Current Budget Cost (BC)	Scheduled Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Estimate to Complete (ETC)	Estimate at Completion (EAC)
WAD 03 (Project Management Administration)	\$ 306,947	\$ 177,059	\$ 11,090	7.16%	\$ 21,989	#DIV/0!	#DIV/0!
NA (Fee)	\$ 20,855	\$ 12,079	\$ 1,539	7.16%	NA	#DIV/0!	#DIV/0!
<b>Total (Less Fee)</b>	<b>\$ 306,947</b>	<b>\$ 177,059</b>	<b>\$ 11,090</b>	<b>7.16%</b>	<b>\$ 21,989</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

Task Order No. 0011	Cost Variance (CVAR)	Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio
WAD 03 (Project Management Administration)	\$ 10,899	\$ (273,626)	1.98	0.12	0.25
NA (Fee)	NA	NA	NA	NA	NA
<b>Total (Less Fee)</b>	<b>\$ 10,899</b>	<b>\$ (273,626)</b>	<b>1.98</b>	<b>0.12</b>	<b>15.97</b>

Prepared 6/27/03

Since only a minimal amount of work has been conducted on this project, the ETC and EAC cannot be accurately calculated.

	MPI	Battelle	Total
Total Budget	\$187,514	\$137,748	\$325,262
Total Expended	\$11,090	\$0	\$11,090
Remaining Funds	\$176,424	\$137,748	\$314,172
Schedule Status	Behind Schedule	Behind Schedule	

Note: WAD 03 is behind schedule due to a slow down period while the USEPA was transitioning between RPM's.

**Calculations:**

PCT = (BCWP/BC) X 100\*

ETC = (BAC-BCWP)/(BCWP/ACWP)\*\*

CAC = ACWP + ETC

CVAR=ACWP-BCWP

SVAR=BCWS-BCWP

CPI = BCWP/ACWP

SPI = BCWP/BCWS

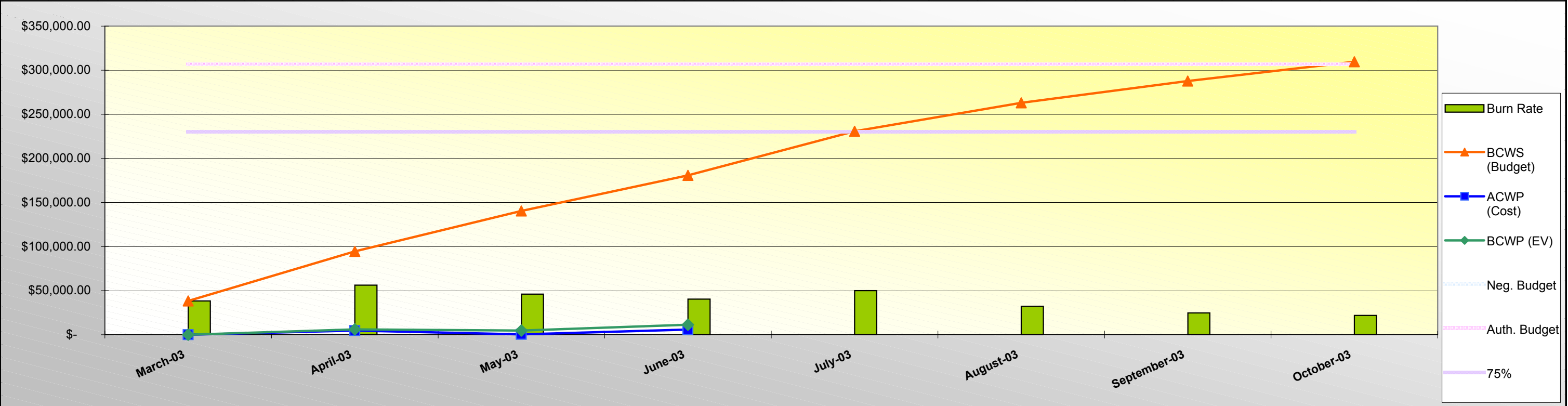
\* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

\*\* - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	Burn Rate - WAD03	Burn Rate - Total
Mar-03	\$ 38,223	\$ 38,223
Apr-03	\$ 55,019	\$ 55,019
May-03	\$ 45,855	\$ 45,855
Jun-03	\$ 40,281	\$ 40,281
Jul-03	\$ 48,837	\$ 48,837
Aug-03	\$ 32,260	\$ 32,260
Sep-03	\$ 24,610	\$ 24,610
Oct-03	\$ 21,860	\$ 21,860
<b>Burn Rate - Total by WAD</b>	<b>\$ 306,945</b>	<b>\$ 306,945</b>

Cost/Schedule Through June 13th, 2003

Summary of WAD 3 Task Order 0011 - Additional RI/FS Services



WAD	Work Order	Work Element	Description	Current Budgeted Cost (BC)	Schedule Budget Cost (BCWS)	Cost to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	Cost to Complete (ETC)	Cost at Complete (CAC)	Cost Variance (CVAR)	Schedule Variance (SVAR)
3	1	00	Project Administration/Reporting	\$ 9,702.00	\$ 4,381.58	\$ -	\$ 0.45	\$ 4,318.58	#DIV/0!	#DIV/0!	\$ 4,318.58	\$ (4,757.55)
3	2	00	Meetings	\$ 6,462.00	\$ 3,231.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (6,462.00)
3	3	00	PEAP and Schedule	\$ 11,099.00	\$ 11,099.00	\$ 3,467.45	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ (3,467.45)	\$ (11,099.00)
3	4	00	Populate & QC Database	\$ 101,216.00	\$ 71,285.12	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (101,216.00)
3	4.1	00	Develop Data Scheme	\$ 45,800.00	\$ 41,496.50	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (45,800.00)
3	4.2	00	Populate Analytical Database	\$ 55,416.00	\$ 29,788.62	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (55,416.00)
3	5	00	Website and GIS System	\$ 139,084.00	\$ 64,996.15	\$ 7,132.15	\$ 0.78	\$ 17,180.43	#DIV/0!	#DIV/0!	\$ 10,048.28	\$ (120,209.90)
3	6	00	Establish Technical Expert Team	\$ 23,740.00	\$ 14,244.00	\$ -		\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (23,740.00)
1	0	00	Labor Totals	\$ 291,303.00	\$ 169,236.85	\$ 10,599.60	\$ 1.23	\$ 21,499.01	#DIV/0!	#DIV/0!	\$ 10,899.41	\$ (267,484.45)
1	0	00	Expenses(Computer/Reproduction)	\$ 6,632.00	\$ 3,316.00	\$ 490.44	\$ 0.07	\$ 490.44	#DIV/0!	#DIV/0!	\$ -	\$ (6,141.56)
1	0	00	Travel and Lodging Expenses	\$ -	\$ -	\$ -	#DIV/0!	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ -
1	0	00	Subcontractor Fee	\$ 9,012.00	\$ 4,506.00	\$ -	\$ -	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ (9,012.00)
1	0	00	WAD Fee(Less Travel)	\$ 20,855.45	\$ 12,078.70	\$ 1,539.26	7.4%	\$ -	#DIV/0!	#DIV/0!	\$ -	\$ -
1	0	00	Job To DateTotals(Less Fee)	\$ 306,947.00	\$ 177,058.85	\$ 11,090.04	7.2%	\$ 21,989.45	#DIV/0!	#DIV/0!	\$ 10,899.41	\$ (273,626.01)

**Note:** The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.